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SIMILAR IN FORMAT TO THE AUTHOR'S "OUTLINE OF BIELORUSSIAN MORPHOLOGY," THIS STRUCTURALLY-ORIENTED TREATMENT OF UKRAINIAN INCLUDES SECTIONS ON --(1) PHONOLOGY, (2) MORPHOPHONEMIC ALTERNATIONS, (3) THE NOUN, (4) THE ADJECTIVE, (5) PRONOUNS, (6) NUMERALS, AND (7) THE VERB. THE AUTHOR BASES HIS FINDINGS ON PUBLISHED HANDBOOKS AND GRAMMARS AS WELL AS DATA FROM NATIVE SPEAKERS. ALL UKRAINIAN MATERIAL IS WRITTEN IN PHONEMIC TRANSCRIPTION RATHER THAN IN THE CYRILLIC ALPHABET. THIS OUTLINE IS OF VALUE TO BOTH LINGUISTS AND STUDENTS OF SLAVIC LANGUAGES AND IS ALSO AVAILABLE FOR $0.75 FROM THE AUTHOR, UNIVERSITY OF PITTSBURGH, PITTSBURGH, PA. 15213. (JD)

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OUTLINE OF UKRAINIAN MORPHOLOGY

BY

CHARLES E. BIDWELL

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OUTLINE OF UKRAINIAN MORPHOLOGY

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1967-68

Preface

The following outline of Ukrainian morphology grew out of a seminar in Slavic descriptive linguistics which I directed at the University of Pittsburgh in the fall term of 1964-5 and in which Messers John Kochik and Anthony Ford, graduate students in Slavic studies, participated. Elaborating and reformulating my findings in that seminar, I have written the present outline. The sources are primarily published grammars and handbooks, as enumerated below, but I have checked certain points of the spoken language with Mrs. Valentina Barson and Mrs. Galina Pavlovich, both native speakers from the Eastern Ukraine, whose aid I gratefully acknowledge. Readers are invited to bring any errors they may find or suggestions for improved presentation to the author's attention.

Published Sources

Jan Ziłyński, *Opis fonetyczny języka ukraińskiego*, Cracow, 1932.

K. Dejna, "Fonologiczny system języka ukraińskiego" *Biuletyn polskiego towarzystwa językoznawczego* X (1950).

J. Rudnyc'kyj, *Hramatyčni tablyci dlja škil i samonavčannja*, Augsburg, 1946.

M.A. Žovtobrjux, *Sučasna ukrajins'ka literaturna mova* I, Kiev, 1961.

M.P. Ivčenko, *Sučasna ukrajins'ka literaturna mova*, Kiev, 1965.

B.M. Kulyk and A.M. Kulyk, *Ukrajins'ka mova I*, Kiev, 1958.

A.P. Medusevs'kyj and R.H. Zjatkovs'ka, *Ukrainian Grammar*, Kiev, 1963.

J. Šerex (G.Y. Shevelov), *Narys sučasnoji ukrajins'koji literaturnoji movy*, Munich, 1951.

E. Onatskyj (Jevhen Onac'kyj), *Vocabolario ucraino italiano*, Rome, 1941.

M.I. Pohribnyj, *Slovnyk naholosiv*, Kiev, 1959.

Ukraine: a concise encyclopedia, Toronto, 1963, pp. 448-69.

Ukrajins'kyj pravopys, Kiev (AN URSR), 1960.

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1.0 Phonology

Vowels

i y u

e o

a

/i e/ are front vowels, the others non-front. /u o/ are rounded (and back), /y a/ unrounded (and central). /i y u/ are high vowels, /e a o/ non-high. Phonetically /y/ is lower than /i u/ and /a/ than /e o/ which latter are mid-vowels. In unstressed position, the contrast /e ≠ y/ is neutralized, a lowered fronted /y/ occurring there.

Consonants

	labial	dental	post-alveolar	velar
stops	p	t		k
	b	d		g
fricatives	f	s	š	x
	v	z	ž	h
affricates		c	č	
		ʒ	ǯ	
nasals	m	n		
lateral		l		
trill		r		
semi-vowel(glide)		j		

In addition to the above non-palatalized consonants, the following palatalized counterparts exist:

/t' d' s' z' c' ʒ' n' l' r'/

/š' ž' č'/

/k' h'/ (and probably /g' x'/)

The palatalized post-alveolars /š' ž' č'/, which occur before /i/ and as geminates, are listed as phonemes, since there is contrast between palatalized and non-palatalized geminate post-alveolars:

žžáty 'to harvest' vs. zbíž'ž'a 'grain'

roššukáty 'to find' vs. vóš'š'u 'louse (Isg.)'

viččým 'stepfather' vs. n'íč'č'u 'night (Isg.)'

Though lacking a plain counterpart, /j/ counts as a palatalized consonant in terms of conditioning morphophonemic changes.

/g/ occurs in a few items, all loanwords, and as a voicing assimilation replacement for /k/. Non-palatalized /ʒ/ is of rare occurrence (in some proper names and in a few items such as ʒús' 'get out!' and kukurúʒa 'maize').

/k' h'/ are established as phonemes by such contrasts as man'ik'úr 'manicure' vs. kúr 'rooster' and h'újs '(naval) jack' vs. húrt 'group, flock'.

All Ukrainian material in the present outline will be cited in the foregoing phonemic transcription. We shall not use the usual Ukrainian spelling, which uses a Cyrillic alphabet similar to the Russian (but with a different function for some of the letters: Г represents the phonemic /h/ as well as the few occurrences of /g/; и represents /y/, while I is used for /i/; е and є indicate /e/ after non-palatalized and palatalized consonants respectively).

The symbols used herein are those customary in linguistic writings: / / indicate phonemic transcription, [ ] phonetic transcription; ∅ is 'zero', C 'consonant', V 'vowel', ∽ 'alternates with', and → means 'is replaced by'. Where necessary, morpheme boundary may be indicated by a hyphen; stems and prefixes will be cited terminating with a hyphen, while final suffixes begin with a hyphen; non-final elements are cited with a hyphen on each side. The cases are abbreviated N A G L D I, i.e. 'nominative, accusative, genitive, locative, dative, instrumental', the three genders m. f. n. (sometimes masc. and fem. are used), the two numbers sg. and pl., while the persons are indicated as 1. 2. 3. Abbreviations of forms, e.g. pres., inf. etc. are transparent; 1.sg.pres. would be read 'first person singular, present tense'.

2.0 Morphophonemic alternations

2.1 Vowel alternations

2.1.1 Automatic changes

(1) After palatalized consonant, /y/ is replaced by /i/.
 xáty vs. zeml'í (Gsg. of 'cottage' and 'land')

(2) The distinction /e ≠ y/ is neutralized in unstressed syllables in speech of conversational speed, both phonemes being replaced by an [y] - like sound. This automatic change is not reflected in the writing system.

2.1.2 Remaining vowel changes are non-automatic

(3) /e o/ in open syllable is replaced by /i/ in closed syllable:

horá : h'ír 'mountain (Nsg. and Gpl.)'
voná : vín 'she : he (m. and f. 3.sg. pronouns)'
semý : s'ím 'seven (G and Nsg.)'

(4) Alternation of vowel /e o y/ with zero. The alternation typically involves insertion of vowel between the last two consonants of an element — when it occurs before consonant or word-boundary, the vowel being absent (zero) when the element occurs word-internally before vowel. Vowel-zero alternations also occur in the roots of some verbs between present and infinitive stem forms

o∾∅

márok : márka 'stamp (Gpl. and Nsg.)'
víkon : viknó 'window (Gpl. and Nsg.)'

e∾∅

réber : rebró 'rib (Gpl. and Nsg.)'
dén' : d'n'á 'day (Nsg. and Gsg.)'
švéc' : ševc'á 'tailor (Nsg. and Gsg.)'

y∽∅ (This alternation is rare.)

odýn : odná 'one (m. and f. Nsg.)'

(5) After items ending in palatalized consonants and post-alveolar consonants, initial /o/ of a following element is replaced by /e/; concomitant with this change automatic replacement of the final palatalized consonant by its plain counterpart takes place before the /e/.

zeml'á : zemléju 'land (NIsg.)'

mežá : mežéju 'field border (NIsg.)'

contrast with xáta : xátoju 'cottage (NIsg.)'

2.2 Alternation of consonant and vowel

/i∽j, u∽v/. Word initial /u i/ (including the clitics u 'in' and i 'and') are replaced by /v j/ when followed by a vowel or when preceded by vowel (without intervening major juncture).

búv u k'inó 'He was at the movie'

bulá v k'inó 'She was at the movie'

ž'yvút' v Orš'i 'They live in Orša'

vasýl' idé 'Basil goes.'

nad'íja jdé 'Hope goes.'

This alternation is almost automatic, but may not occur in certain styles and also in certain items, particularly learned words (especially if the alternation would cause ambiguity), and foreign borrowings.

2.3 Consonant changes

2.3.1 Automatic changes

(1) A consonant which has a palatalized counterpart is replaced by its palatalized counterpart when followed by /i/:

snopá : s'n'íp 'sheaf (Gsg. and Nsg.)

xáta : xát'i 'cottage (Nsg. and Dsg.)

(2) A palatalized consonant is replaced by its plain counterpart when followed by /e/.

z'át' : z'átem 'son-in-law (Nsg. and Isg.)'

(3) Palatalized /r'/ is replaced by plain /r/ before word boundary.

l'íkar'a : l'íkar 'physician (GNsg.)'

(4) The dental consonants /s z c ʒ t d n l/ are replaced by their palatalized counterparts when followed by a palatalized consonant.

(5) A geminate consonant sequence is reduced to a single consonant before word-boundary.

(6) The sequence consonant plus /j/ loses /j/ before word-boundary.

(7) Voiced vs. voiceless. Morphophonemically the consonants are:

voiceless	p	t	k	f	s	š	x	c	č
voiced	b	d	g	-	z	ž	h	ʒ	ǯ

Palatalized counterparts of the above are also respectively voiced or voiceless. All other consonants are neutral with regard to the voicing contrast.

Within consonant clusters, voiceless consonants are assimilated with regard to voicing to the last consonant of the cluster for which voicing is distinctive. In some styles and varieties voiced consonants are likewise assimilated. Even when other devoicing is absent, /h →x/ is usual.

próz'ba 'request' cf. prosýty 'to ask'

Voicing assimilation in clusters is however not characteristic of all styles and varieties of Ukrainian speech.

(8) Before /š ž č ǯ/, /s z/ are replaced by /š/ or /ž/.

bez *plus* šúm : beššúmu 'without noise'

bez *plus* ǯereló : bežǯerelá 'without a source'

(9) Before /s' z' c' ʒ'/, /š ž/ are replaced by /s' z'/

bjéš 'you beat' *plus* s'a (reflexive particle): bjés's'a

hrúška, hrús'c'i 'pear (N and DLsg.)'

(10) /t t' č/ + /c' s'/→/c'c'/

dóčka : dóc'c'i 'daughter (N and DLsg.)'

pytájut' 'they ask' *plus* s'a (reflexive particle) : pytájuc'c'a

(11) In a sequence C + j, where C is a consonant other than /r/ or a labial consonant, C is replaced by its palatalized counterpart (if it has such) and doubled, unless already preceded by a consonant, while /j/ is deleted.

Cf. stem changes in kos't' nouns before the Isg. ending -ju

Nsg.	Isg.	
króv	króvju	'blood'
n'íč	n'íč'ču	'night'
míd'	míd'd'u	'copper'
rád'is't'	rád'is't'u	'joy'

2.3.2 Non-automatic change

(1) J-change (substitutive softening)

c', k, t∽t' → č

d∽d' → ǯ

x, s∽s' → š

h, z∽z' → ž

labial C → labial + /l'/

This alternation is very widespread; it occurs in noun and verb derivation, and in inflection.

terpíty : terpl'ú 'to suffer (inf. and 1.sg.pres.)'

pysáty : pýšeš 'to write (inf. and 2.sg.pres.)'

bíh : bóže 'God (NVsg.)'

(2) I-change (occurs in noun morphology)

k → c' ruká : ruc'í 'hand (N and DLsg.)'

h → z' knýha : knýz'i 'book (N and DLsg.)'

x → s' múxa : mús'i 'fly (N and DLsg.)'

(3) /t d → s/ before /t t'/ in verb morphology

pletú : plestý 'to plait (1.sg.pres. and inf.)

vedú : vestý 'to lead (1.sg.pres. and inf.)'

(4) /t d→∅/ before /l v m s/ in verb morphology

stem : jid- 'to eat' jím, jisý (1.2.sg.pres.)

plet- 'to plait' pl'ív, plelá (past m. and f.)

ved- 'to lead' vív, velá (past m. and f.)

(5) #v∽∅. Prothetic /v/; when initial /o/ in open syllable is replaced by /i/ in closed syllable, a /v/ occurs before /i/

ovés : vivsá 'oats (Nsg. and Gsg.)'

(6) lV∽v$_{\#}^{C}$. In position before word-boundary or consonant /l/ is replaced by /v/. Practically, this affects only the past formant which is /v/ before the zero ending of the masculine past tense and before the participial formant -*š*-, though it occurs in some scattered items as *piv-* (as in *pivr'ík* 'half-year') vs. *polovýna* 'half'.

3.0 The noun

3.1 Noun types and endings

3.1.1 *s't'íl* - type

	sg.		pl.
V	-u, -e (-o)	VN	-y∽i (-a)
N	∅ (-o)	A	(like G or N)
A	(like G or N)	G	-'iv (-ej, -∅)
G	-a (-u)	L	-ax
L	-ovi∽evi (-u, -'i)	D	-am
D	-ovi∽evi (-u)	I	-amy (-ýma, -my)
I	-om∽em		

(1) In the Vsg. -*u* is regular for soft stems (soft stems are defined as those ending in palatalized or post-alveolar consonant); it also occurs with some hard stems, particularly those ending in /k/; before -*e* velars undergo J-change; -*e* is usual for hard stems, but occurs with some soft stems.

(2) In VNsg. -*o* is confined to a few kinship terms (*bát'ko* 'father') personal names (*pávlo* 'Paul') or family names (*ševčénko*); for these VN are identical.

(3) In the accusative, animate nouns have an ending identical with the genitive, inanimates with the nominative. A few nouns denoting inanimate objects are treated grammatically as animates, i.e. have GA the same. Likewise some nouns denoting domestic animals have alternate accusative forms like the nominative.

(4) In the Gsg. the basic ending is -*a*; many inanimates, particularly those denoting masses or substances, take -*u*.

(5) After soft stems (except in VNsg.), ending initial /o/ is replaced by /e/ (cf. LDIsg.) and ending initial /y/ by /i/ (cf. Npl.). Before ending initial /e/, including /e/ replacing /o/ after soft stems, stem-final palatalized consonant is automatically replaced by its non-palatalized counterpart.

(6) In the DLsg. the ending -*ovi*∽*evi* is preferred for animates, though it also occurs with inanimates. In Dsg. the ending -*u* occurs after both hard and soft stems, as do the endings

-*u* and -'*i* in the Lsg. Before Lsg. -'*i*, I-change of velars takes place; other consonants are replaced by palatalized counterparts, if such exist.

(7) A few nouns have alternate Npl. in -*á* (cf. *xl'ibá* 'loaves of bread').

(8) A few nouns, as *soldát* 'soldier', plus nouns with the suffix -*an-(yn)*- or -*yn*- (dropped in plural), have -∅ in Gpl. Likewise -*ej* occurs in the Gpl. of a few nouns.

(9) The Ipl. ending -*my* occurs in a few nouns; -*yma* occurs in a few nouns, especially denoting objects occurring in pairs.

(10) Nouns with the suffixes -*an-yn*- or -*yn*- drop -*yn* in the plural.

(11) Mixed stem nouns in -*ar'*- (e.g. *skl'ár* 'glassmaker'); in these nouns, final /r'/ is replaced by its non-palatalized counterpart, not only before word-boundary and ending initial /e/ (automatic), but also before ending initial /a/ (in Gsg. and LDI pl.).

(12) *zvír* 'beast' and *komár* 'mosquito' change /r/ to /r'/ in plural.

(13) *čóbit* 'boot' has an alternate stem with final /t'/ in LDIpl.

3.1.2 *misto* - type

sg.	pl.
VNA -o ∽ e (-a)	VNA -a
G -a	G -∅ (-'iv, -ej)

L -'i (-ovi, -u)	L -ax
D -u (-ovi∽evi)	D -am
I -om (-am)	I -amy

(1) After stem-final soft C, ending-initial /o/ is replaced by /e/, before which stem-final palatalized C is then replaced by its non-palatalized counterparts; except that after stem final geminate palatalized C or labial C plus /j/, or /rj/, ending-initial /o/ is replaced by /a/ (Nsg. -*a*, I sg. -*am*).

(2) In DLsg. nouns with stem-final /k/ have -*ovi* or -*u*.

(3) In Dsg. a few nouns (in addition to those with stem final /k/) have -*ovi*∽*evi*.

(4) In Gpl. a few nouns have -'*iv*.

(5) Before Gpl. -Ø, geminate palatalized C is reduced to a single palatalized C; stem-final /j/ after C drops. These changes are automatic, as geminate consonant and Cj do not appear word-finally in Ukrainian.

(6) In the plural, *čúdo* 'wonder, miracle' and *nébo* 'heaven, sky' extend their stems by /es/.

(7) In the plural, the stem-final velar C of *óko* 'eye' and *úxo* 'ear' shows J-change (for 'ear' more usual is the stem *vux*-, with no change in the plural). These, plus *plečé* 'shoulder' have -*ej* in Gpl. (alternately, *plečé* has -Ø). In Ipl. *óko* and *úxo* have -*ýma*.

(8) Mixed neuter nouns with stem extension. A limited list of

neuter stems show the extensions -*at*- or -*en*- in all forms but VNAIsg. (e.g. *kurčá* 'chicken', *imjá* 'name'). The extension -*en*- replaces -*j*- of the VNAIsg. (all stems showing the extension -*en*- end in labial C plus /j/). In one variety of the standard language, -*en*- is replaced by -*en'*- in GLDsg. In VNAIsg. /a/ is substituted for ending-initial /o∽e/ as in nouns with stem-final geminate palatalized C, i.e. VNA -*a*, I -*am*. In the remaining cases of the singular (GLD) we have *Žínka*-type endings, i.e. G -*y*, DL -*i*. In the plural, we find regular *místo*-type endings, except that nouns denoting persons have A identical with G, as do alternately those denoting animals. The Isg. of *imjá* 'name' and *plémja* 'tribe' have alternate forms which show the stem-extension -*en*- plus the *místo*-type ending -*em*.

3.1.3 *ž'ínka* and *k'ís't'* types

ž'ínka-type		*k'ís't'*-type	
Sg.			
V	-o∽e	V	-e
N	-a	NA	-0
A	-u		
G	-y∽i		
LD	-'i	GLD	-i
I	-oju∽eju	I	-ju
Pl.			
VN	-y∽i		-i

A	(like G or N)	(like G or N)
G	-∅ (-ej)	-ej
L	-ax	-ax
D	-am	-am
I	-amy	-amy

(1) Velars undergo I-change before ending -'*i* of LDsg.; other consonants are replaced by their palatalized counterparts, if such exist.

(2) After soft stems, ending initial /o/ is replaced by /e/ (cf. VIsg.) and ending initial /y/ by /i/ (cf. Gsg., NApl.)

(3) Before ending initial /e/ (including /e/ replacing /o/ after soft stems), stem-final palatalized consonant is replaced automatically by its non-palatalized counterpart.

(4) A very few *ž'ínka*-type nouns have -*ej* in the Gpl.

(5) When -*ju* is attached to *k'ís't'* stems in consonant other than labial or /r/, the change described in 2.3.1 (11) takes place.

(6) The noun *máty* 'mother' has two stem variants: /maty-∽ mater-/; the first variant occurs in the VNsg. (with ending -∅ in vocative); the second in remaining forms (with /e→'i/ in closed syllable).

(7) Mixed masculine nouns (*stárosta* 'headman') have *ž'ínka*-type endings in the singular and *s't'íl*-type endings in the plural (i.e. they have -'*iv* in Gpl, the only difference in ending between the two types in the plural.).

3.2 Example paradigms

	s't'íl-type nouns		special s't'íl paradigms	
	hard stems		mixed r/r'-stems	o-nouns
	s'n'íp	instrúktor	skl'ár	bát'ko
	'sheaf'	'instructor'	'glassmaker'	'father'
sg.				
V	snópe	instrúktore	skl'áre	bát'ko
N	s'n'íp	instrúktor	skl'ár	
A		instrúktora	skl'ará	bát'ka
G	snopá			
L	snopí, -óvi	instrúktorovi, -i	skl'arévi	bát'kovi
D	snopóvi, -ú	instrúktorovi, -u		bát'kovi, -u
I	snopóm	instrúktorom	skl'arém	bát'kom
pl.				
VN	snopý	instrúktory	skl'ar'í	bat'ký
A		instrúktor'iv	skl'ar'ív	bat'k'ív
G	snopív			
L	snopáx	instrúktorax	skl'aráx	bat'káx
D	snopám	instrúktoram	skl'arám	bat'kám
I	snopámy	instrúktoramy	skl'arámy	bat'kámy

st'íl-type nouns

soft stems

	palatalized	stem-final /r'/	/j/	post-alveolar
	z'át'	l'íkar	kráj	hráč
	'son-in-law'	'physician'	'region'	'player'
sg.				
V	z'át'u	l'íkar'u	kráju	hráču
N	z'át'	l'íkar	kráj	hráč
A	z'át'a	l'íkar'a		hračá
G			kráju	
L	z'átevi	l'íkarevi,-'i	kráji,-ú	hračévi
D		l'íkarevi,-u	krájevi,-u	
I	z'átem	l'íkarem	krájem	hračém
pl.				
VN	z'at'í	l'ikar'í	krají	hrač'í
A	z'at'ív	l'ikar'ív		hrač'ív
G			krajív	
L	z'at'áx	l'ikar'áx	krajáx	hračáx
D	z'at'ám	l'ikar'ám	kraján	hračám
I	z'at'ámy	l'ikar'ámy	krajámy	hračámy

	žínka-type		mixed masc.-type		k'ís't'-type
	škóla	zeml'á	stárosta	sud'd'á	míd'
	'school'	'land'	'headman'	'judge'	'copper'
sg.					
V	škólo	zemlé	stárosto	suddé	míde
N	škóla	zeml'á	stárosta	sud'd'á	míd'
A	škólu	zéml'u	stárostu	sud'd'ú	
G	škóly	zeml'í	stárosty	sud'd'í	míd'i
LD	škól'i		stárost'i		
I	škóloju	zemléju	stárostoju	suddéju	míd'd'u
pl.					
VN	škóly	zéml'i	stárosty	súd'd'i	míd'i
A			stárosťiv	súd'd'iv	
G	šk'íl	zemél'			mídej
L	škólax	zéml'ax	stárostax	súd'd'ax	míd'ax
D	škólam	zéml'am	stárostam	súd'd'am	míd'am
I	škólamy	zéml'amy	stárostamy	súd'd'amy	míd'amy

místo-type

	místo	lóže	znan'n'á	kurčá	imjá
	'city'	'bed'	'knowledge'	'chicken'	'name'

sg.

VN	místo	lóže	znan'n'á	kurčá	imjá
A					
G	místa	lóža		kurčáty	ímen'i
L	mís't'i	lóžu	znan'n'í	kurčát'i	
D	místu		znan'n'ú		
I	místom	lóžem	znan'n'ám	kurčám	imján, ímenem

pl.

VN	mistá	lóža	znan'n'á	kurčáta	imená
A				(like N or G)	
G	míst	lóž	znán'	kurčát	imén
L	mistáx	lóžax	znan'n'áx	kurčátax	imenáx
D	mistám	lóžam	znan'n'ám	kurčátam	imenám
I	mistámy	lóžamy	znan'n'ámy	kurčátamy	imenámy

3.3 Stress patterns in the noun[1]

In a given form, stress may fall on the ending or on any syllable of the stem. Ending stress in the noun is always on the first syllable of an ending of more than one syllable. In the paradigm, stress may be fixed (on the same syllable in all forms) or shifting. Productive patterns of stress shift show shift between stem and ending and differentiate singular and plural (i.e. all singular forms will show one stress position, plural formsanother); however minor patterns (with relatively few exponents) do exist which show shift from one syllable to another in the stem and shift within the singular or plural paradigm.[2]

In the description of stress patterns, ending stress will be designated E, stem stress S, and mixed stress (shift within singular or plural paradigm) M. In the presence of zero ending, ending stress automatically goes to the last syllable of the stem. If the vocative ending differs from the nominative, ending stress likewise goes to the final stem syllable. The patterns follow: SE (stem stress in singular; ending stress in plural). Following this pattern are a large number of s't'íl and m'ísto type nouns (especially those with monosyllabic stems; there are also a fair number of two-syllable and some three syllable stems), a fair number of ž'ínka nouns, and one kós't' noun (máty 'mother'). All nouns which extend their stem by -en- or

-*es*- belong to this type. Inanimate *st'íl* nouns of this pattern with -*u* in the Lsg. shift stress to that ending.

ES (ending stress in singular; stem stress in plural). Following this pattern are many monosyllabic and a fair number of polysyllabic stems of the *ž'ínka*-type, a number of the mixed declension, a fair number of *m'ísto* nouns, and a very few *s't'íl* nouns (e.g. *k'ín'* 'horse'). A few *ž'ínka* nouns of this pattern (e.g. *syrotá* 'orphan', *sestrá* 'sister') have alternate Gpl. forms with ending stress.

Mixed stress (M) implies stem stress on Asg. (and Nsg., if the same as Asg.) and on Npl. (and Apl. if the same as Npl.) and ending stress elsewhere.

MM (mixed stress in both singular and plural); about ten *ž'ínka*-type nouns (e.g. *nohá* 'leg', *ruká* 'hand')

MS (mixed stress in singular, stem stress in plural); about twenty *ž'ínka*-type nouns (e.g. *dušá* 'soul').

MSg (mixed stress in singular, stem stress in plural, except for Gpl., which has ending stress); a very few *ž'ínka*-type nouns (e.g. *borodá* 'beard', *holová* 'head')

SM (stem stress in singular, mixed stress in plural); about ten *k'ís't'* nouns (e.g. *n'íč* 'night') and one *s't'íl* noun (*zúb* 'tooth).

SlM (stem stress in singular, except for Lsg. which has ending stress; mixed stress in plural), a few *k'ís't'* nouns (*vís'* 'axle', *k'ís't'* 'bone').

$\vec{S}$ (shift within stem) followed by about twelve *místo* nouns and very few s't'íl nouns (e.g. cýhan 'gypsy', dérevo 'tree').

Examples:

(1) shifts between singular and plural paradigms

SE

Nsg.	brát	Npl.	bratý	'brother'
	bát'ko		bat'ký	'father'
	kúxar		kuxar'í	'cook'
	učýtel'		učytel'í	'teacher'
	bolóto		bolotá	'swamp'
	místo		mistá	'city'
	pís'n'a		pis'n'í	'song'

ES

Nsg.	kozá	Npl.	kózy	'goat'
	sud'd'á		súd'd'i	'judge'
	viknó		víkna	'window'

Nsg.	kǐ́n'	Gsg.	kon'á	Npl.	kón'i	'horse'

$\vec{S}$

Nsg.	cýhan	Npl.	cyhány	'gypsy'
	dérevo		deréva	'tree'

(2) patterns with mixed stress

MM	sg.	pl.	
N	ruká	rúky	'hand'
A	rúku		
G	rukýˇ	rúk	

L	ruc'í	rukáx
D		rukám
I	rukóju	rukámy
V	rúko	

MS

	sg.		
N	dušá	Npl. dúš'i	'soul'
A	dúšu	etc.	
GLD	duš'í		
I	dušéju		
V	dúše		

MSg

	sg.	pl.	
N	borodá	bórody	'beard'
A	bórodu		
G	borodý	bor'íd	
L	borod'í	bórodax	
D		bórodam	
I	borodóju	bórodamy	

SM

NAsg. n'íč NApl. nóči Gpl. nočéj 'night'

Nsg. zúb NApl. zúby Gpl. zubív 'tooth'

SlM

NAsg. vís' Lsg. (na) os'í NApl. ós'i Gpl. oséj 'axle'

4.0 The adjective

4.1 basic endings

	m.	n.	f.	pl.
N	-yj	-e	-a	-'i
A	(N∽G)		-u	(N∽G)
G	-ohu		-oji	-yx
L	-omu, -'im		-'ij	
D	-omu			-ym
I	-ym		-oju	-ymy

(a) After stems ending in C' or /j/, y → i automatically. Thus, sýn'ij 'blue' (LDIpl. sýn'ix, sýn'im, sýn'imy), beskrájij 'endless', trét'ij 'third'.

(b) Before ending-initial /i/, preceding C is palatalized (i.e. replaced by palatalized counterpart, if one occurs, otherwise by palatalized allophones).

(c) Stems in /c/ palatalize stem-final C before endings beginning with /a o u/. Thus, bl'idolýcyj 'palefaced' has f.N bl'idolýc'a, f.A bl'idolýc'u, f.G bl'idolýc'oji, etc.

(d) Stress is fixed (i.e. does not shift) either on a syllable of the stem or the first syllable of the ending in all adjectives (except for certain special adjectives listed below, which stress the last syllable of the ending).

sample paradigm: dóbryj 'good'

	m.	n.	f.	pl.
N	dóbryj	dóbre	dóbra	dóbr'i
A	∽		dóbru	∽
G	dóbroho		dóbroji	dóbryx
L	dóbromu, dóbr'im		dóbr'ij	
D	dóbromu			dóbrym
I	dóbrym		dóbroju	dóbrymy

(e) An alternate "short" ending ∅ for the m.N occurs in predicate usage only for a limited number of stems.

4.2 Special adjectives

	1.	2.	3.
m.N	brát'iv-∅	mij-∅	čýj-∅
n.NA	brátov -e	moj-é	-é
m.n.G	-oho	m -ohó	-óho
L	-omu,-im	moj-ému,-ím	-ómu, -ému , -ím
D	-omu	-ému	-ómu,-ému
I	-ym	-ím	-ím
f.N	-a	-á	-á
A	-u	-ú	-ú
G	-oji	-éji	-éji
LD	-ij	-íj	-íj
I	-oju	-éju	-éju
pl.N	-i	-í	-í
GL	-yx	-íx	-íx
D	-ym	-ím	-ím
I	-ymy	-ímy	-ímy

Special Adjectives

	4.	5.	6.	7.
m.N	tój-0	céj-0	vés'-0	odýn-0
NA	t -é	c -é	vs -é	odn -ó,-é
G	-ohó	c' -ohó	vs' -ohó	-ohó
L	-ómu,t'-ím	-omú,-ím	-omú,-ím	-omú,odn'-ím
D	-omú	-omú	-omú	-omú
I	-ým	c -ým	-ím	-ým
f.N	-á	c' -á	-á	-á
A	-ú	-ú	-ú	-ú
G	t'ij-éji,t-óji	c'ij-éji	vs'ij-éji	odn'ij-éji,odn-óji
LD	t' -íj	c' -íj	vs' -ij	odn'-íj
I	t'ij-éju,t-óju	c'ij-éju	vs'ij-éju	odn'ij-éju,odn-óju
pl.N	t' -í	c' -í	vs' -í	odn'-í
GL	t -ýx	c -ýx	-íx	odn -ýx
D	-ým	-ým	-ím	-ým
I	-ýmy	-ýmy	-imá	-ýmy

Class membership: Possessives with the suffixes *-ov-*, *-ev-*, *-yn-*; also *náš* 'our', *váš* 'your' belong to Class 1. To class 2 belong *míj* 'my', *tvíj* 'your (sg.),' and *svíj* (reflexive possessive). The remaining five classes are composed of one member (the example) each.

Endings: All have zero ending in m.N. Classes 2 through 7 replace ending-initial /o/ by /e/ after C' or /j/ in f.G and f.I; class 2 does so also in m.n.L and D, while class 3 has alternate forms in m.n.L and D showing this replacement. Class 7 has *-o* in n.NA (with an alternate showing the "normal" ending *-e*). Remaining forms of all classes have regular adjective endings, except Ipl. *vs'imá*. (m.A and pl.A are not listed as they are identical to N or G respectively depending whether the noun modified is animate or inanimate.)

Stem changes: Classes 1 and 2 show /o, e/⟶/i/ in closed syllable. Class 2 loses stem-final /oj/ in m.n.G. Classes 4 through 7 show stem extension /'ij/ in f.GI., though class 7 has alternate forms without the extension. Classes 4 and 5 show the stem extensions /oj/ and /ej/ respectively in the m.N. Class 5 (like other stems in /c/) replaces /c/ by /c'/ before endings beginning with /a o u/. Classes 6 and 7 have inserted /e/ and /y/ respectively eliminating stem-final consonant cluster before zero ending. (palatalization before /i/ is automatic and is not therefore specifically mentioned here.)

Stress: Classes 2 through 7 have ending stress. The second syllable of bisyllabic endings is stressed in the m.n.Gsg. in class 2 and 4 through 7, in the m.n.Dsg. in class 4 through 7 and in the m.n.Lsg. in class 5 through 7.

5.0 Pronouns

	Sg. 1.	2.	Reflex.	Pl. 1.	2.	3.
VN	já	tý	—	mý	vý	voný
GA	mené	tebé	sebé	nás	vás	jíx, nýx
L	men'í	tobí	sobí			nýx
D				nám	vám	jím
I	mnóju	tobóju	sobóju	námy	vámy	nýmy

	Sg. 3. m.	n.	f.	Interrogative		
VN	vín	vonó	voná	xtó	NA	ščó
GA	johó, ňóho		jijí, néji	kohó	G	čohó
D	jomú		jíj	komú		čomú
L	ňím ∽ ňómu		ňíj	kím, kómu		čím, čómu
I	ným		néju	kým		čým

6.0 Numerals

	2. m/n.	2. f.	3.	4.	'both' m.	'both' f.	'both' n.
N	dvá	dví	trý	čotýry	obýdva	obýdvi	obóje
A	(like G if anim., like N if inanim.)						
GL	dvóx		tr'óx	čotyr'óx	obóx		
D	dvóm		tr'óm	čotyr'óm	obóm		
I	dvomá		tr'omá	čotyrmá	obomá		

	'how many'	'many'	5.	(alternate forms)
N	sk'íl'ky	baháto	pját'	
A	(like G if anim., like N if inanim.)			
GL	sk'il'kóx	bahat'óx	pjatý	pjat'óx
D	sk'il'kóm	bahat'óm		pjat'óm
I	sk'il'komá	bahat'omá, bahat'má	pjat'má	pjat'omá

Like *sk'íl'ky* are declined *st'íl'ky* 'so many', *k'íl'ka*, *dék'il'ka* 'a certain number'.

Like *pjat'* are declined numerals from five through thirty and also *k'il'kanác'c'at'* 'a certain number between 10-20'. The numerals *š'íšt'* 'six' and *s'ím* 'seven' have the stem-variants *šest-*, *sem-* before *-y*, with *š'išt'-* and *s'im-* before all other endings, except that *s'im* has *s'o-* before the ending *-ma*; *vís'm-* 'eight' has *vis'im* before ∅, *vos'm-* before *-y*, and *vis'm-* before all other endings, except before -ma where vis'- occurs. The nominative forms 9-30 are:

9. dévjat'
10. dés'at'
11. odynác'c'at'
12. dvanác'c'at'
13. trynác'c'at'
14. čotyrnác'c'at'
15. pjatnác'c'at'
16. šisnác'c'at'
17. s'imnác'c'at'
18. vis'imnác'c'at'
19. devjatnác'c'at'
20. dvác'c'at'
30. trýc'c'at'

	50.				40.
NA	pjaddes'át			NA	sórok
GL	pjaddes'atý	∽	pjaddes'at'óx	GLDI	soroká
D			pjaddes'at'óm		
I	pjaddes'at'má		pjaddes'at'omá		

Like pjaddes'át are declined š'izdes'át 'sixty', s'imdes'át 'seventy', vis'imdes'át 'eighty', and k'il'kades'át 'some tens of'. Like sórok are declined devjanósto 'ninety', and stó 'hundred'. Alternate instrumental forms sorokmá, sorokomá '40' and stomá '100' exist.

	200	500
NA	dvís't'i	pjatsót
G	dvoxsót	pjatysót
L	dvoxstáx	pjatystáx
D	dvomstám	pjatystám
I	dvomastámy	pjatystámy ∽ pjat'omastámy

Like *dvís't'i* are declined *trýsta* '300', *čotýrysta* '400'; like *pjatsót* are declined the hundreds up to *devjatsót* '900'. Note that the second element of   '300', '400' is the oblique (G) form of *stó*, and of '500'-'900', -*sot* which is a Gpl. form (/o/ is an 'inserted' vowel). The oblique case of the hundreds have as their second elements regularly formed plural case forms of *stó* (G -*sot*, L -*stax*, D -*stam*, I -*stamy*), while the first element is the corresponding case form of the appropriate digit, except that in 500-900 the first element of the instrumental may be either the genitive or the instrumental of the digit.

Collective numerals — the following NA collective numeral forms exist: 2. *dvóje* 3. *tróje* 4. *čétvero* 5. *pjátero* 6. *šéstero* 7. *sémero* 8. *vós'mero* 9. *dévjatero* 10. *dés'atero* (higher numerals are formed by addition of suffix -*ero* to the appropriate numeral stem). In the oblique cases there are no special collective forms, the forms of the ordinary cardinal numerals being used instead.

The words *týs'ača* '1000', *mil'jón* 'million', etc. are grammatically not numerals, but nouns, while *odýn* 'one' is a special adjective; *pivtorá* 'one and a half', *pivtorásta* '150' are indeclinable. Colloquial speech shows a tendency to eliminate the morphological category of numerals by treating many of them as indeclinable.

Note that numerals in the N(A) tend to be stressed on the stem, while in the oblique cases they have ending stress. In dék'il'ka stress stays on de- in all forms.

Morphophonemic change in the numeral stem includes loss of palatalization before the ending -y, and in 50-80 before zero ending as well, and inserted vowel: s(ó)t. vís'(i)m.

7.0 The verb

7.1 Verb stem classes

In the following outline stems are classified according to their structure. In terms of their structure verb stems may be divided into two broad groups; those that maintain a fairly stable stem-shape throughout their paradigm (not taking into account morphophonemic changes conditioned by individual formants or endings) and those that differentiate two basic stem shapes, present stem (the stem for the present tense, present participles and gerunds, and imperative) and infinitive stem (the stem for the infinitve, past, past participles and gerunds); the two basic shapes differing in that the stem vowel which terminates the infinitve stem is dropped in the present stem.[3]

In terms of their selection of endings and formant in present stem forms (except the imperative) verb stems are divided into two conjugations. The two dichotomies (of stem structure and of conjugational type) do not coincide. All but one (bíxty 'to run') of the second conjugation verbs are vowel dropping verbs, while first conjugation verbs comprise both stable stem and vowel dropping verbs.

Stable stem verbs can be further subdivided into root verbs, and verbs with stable stem vowels.

The following morphophonemic rule has general application in verb inflection: stems ending in a vowel, whether a root-final vowel, a stable stem-vowel, or vowel resulting from alternation of suffix, automatically add a /j/ in present stem forms.

Thus:	pytá-ty	'to ask'	1.sg.pres.	pytá-j-u
	mý-ty	'to wash'	1.sg.pres.	mý-j-u
	kupu-v-á-ty	'to buy'	1.sg.pres.	kupú-j-u

Verbs given as examples accompanying the classification below will be generally given in the infinitive and in the 2.sg.pres. Where necessary for illustration the morphophonemic stem is also given.

Conjugation I.

7.1.1 Root verbs

(1) Consonant root verbs. Stems consist of root having the shape (C)CVC; stem may end in /p b v s z t d k h r/

soptý : sopéš 'to sigh'
hrebtý : hrebéš 'to row'
nestý : neséš 'to carry'
veztý : vezéš 'to convey'
plestý: pletéš 'to plait'

krásty : krádeš 'to steal'

pektý : pečéš 'to bake'

stryxtý : stryžéš 'to shear'

térty : tréš 'to rub'

Stem final velars undergo J-change in the present stem. Consonant root verbs with stems in /r/ lose the root vowel in the present stem except for *dérty : deréš* 'to tear'. The consonant root verb *s'ísty : s'ádeš* 'to sit down' shows a vowel alternation /i ∽ a/ between infinitive stem and present stem. The verbs *rostý : rostéš* 'to grow' stem *ros(t)-*, *žýty : žyvéš* 'to live' stem *ži(v)-*, and *búty : búdeš* 'to be' stem *bu(d)-* lose the final consonant of their stems in the infinitive stem; *búty* has also an anomalous present form *je* 'there is'. The root verb *itý* 'to go' has the present stem *id-*, *i-* in the infinitive, *išo-* in the masculine past, and *iš-* in the remaining past forms.

(2) Vowel root verbs

Stems consist of root having the shape (C)CV, the vowel being /u/ or /y/.

čúty : čúješ 'to hear'

mýty : mýješ 'to wash'

(3) Miscellaneous root verbs

Root verbs showing the alternation, infinitive stem Cy- ∽ present stem Cj-:

býty : bjéš 'to beat'

Root verbs showing the alternation, infinitive stem (C)C + 'a ∽ present stem (C)C + N (N signifies 'nasal consonant'):

žáty : žnéš 'to harvest'
vz'áty : viz'méš 'to take'

A number of verbs of the above group also show an alternation /n'/∽/Ø/; thus *pryjn'áty* : *prýjmeš* 'to receive', *zajn'áty* : *zájmeš* 'to borrow'. One verb *dúty* : *dméš* 'to blow' shows an alternation /u/ (infinitive stem) ∽ /m/ (present stem).

Four verbs show the nasal suffix -*n*- in the present stem and lose it in the infinitive stem.

státy : stáneš 'to stand'
zustr'íty : zustr'íneš 'to meet'
d'íty : d'íneš 'to put'
od'axtý : od'áhneš 'to dress'

One verb has the nasal suffix -*n*- in the present stem, replaced by /s/ in the infinitive and lost in the remaining infinitive stem forms:

kl'ásty : past kl'áv, kl'alá : kl'anéš 'to curse'

7.1.2 Stable stem-vowel verbs

Stem consists of root, or root plus suffixes, plus stem vowel -*a*- or -*i*-.

pytáty : pytáješ 'to ask'

molod'íty : molod'íješ 'to become young'

7.1.3 Vowel dropping verbs

Stem consists of a root plus stem vowel or a root plus suffixes plus stem vowel; stem vowel is dropped in present stem.

(1) a-dropping verbs

žďáty : žďéš 'to wait'

víjaty : víješ 'to wave'

In a number of these, the consonant before dropped -a- undergoes J-change in the present stem (including all with velar before -a-).

pysáty : pýšeš 'to write'

plákaty : pláčeš 'to cry'

A smaller number, with monosyllabic stems, insert a vowel in the present stem (when -a- is dropped).

bráty : beréš 'to take'

hnáty : žeréš 'to drive'

The a-dropping verb sláty 'to send' has the present stem šl'-. The a-dropping verb jíxaty 'to ride' has an irregular stem alternation; present stem jid- (jídeš etc.).

-v-a-dropping verbs

(-v-a- follows a root ending in /a/; comprises but three verb families: dava- 'to give', -znava- 'to know', -stava- 'to place'; -v-a- is not dropped in the imperative of these verbs).

daváty : dajéš 'to give'

(-v-a- follows the suffix -u-; a productive class with numerous members)

kupuváty : kupúješ 'to buy'

(2) -o- dropping verbs

In this small group of verbs -o- is preceded by /or/ or /ol/. One verb, molóty, replaces /ol/ by /el'/ in the present stem; /r l/ preceding dropped -o- are palatalized in the present stem (but automatically depalatalized before elements beginning with /e/).

boróty : bor'ú : bóreš 'to fight'
kolóty : kol'ú : kóleš 'to stab'
molóty : mel'ú : méleš 'to grind'

(3) -i- dropping verb (consonant preceding dropped -i- undergoes J-change in present stem)

xot'íty : xóčeš 'to want'

(4) Verbs with the suffix -n(u)-, lose -u- in the present stem.

kýnuty : kýneš 'to throw'

Some verbs of this type lose the suffix -nu- in some or all of the infinitive stem forms other than the infinitive itself.

zvýknuty : zvýkneš : past m. zvýk 'to accustom'

Conjugation II (all but one, bíxty, are vowel dropping verbs).

(5) -y- dropping

boronýty : borónyš 'to defend'

(6) *i-* dropping

let'íty : letýš 'to fly'

(7) *a-* dropping

ležáty : ležýš 'to lie'

(except for one verb *spáty* 'to sleep', *a-* dropping verbs show /š ž č j/ before dropped /a/).

The verb *bíxty* 'to run' is a root verb (no stem vowel), infinitive stem *bih-*, present stem (with J-change) *biž-*.

bíxty : bižýš 'to run'

7.2 The verb forms

7.2.1 Present tense

The present tense endings consist (except for the first person singular, where the ending is -*u*) of an ending vowel plus a final element. The ending vowel is /e/ for the first conjugation and /y/ for the second conjugation in 2.3. sg. and 1.2. pl. In 3. pl. the ending vowel is /u/ in the first conjugation and /a/ in the second conjugation. The final elements are:

1. pl. -mo

2. sg. -š   2. pl. -te

3. sg. and pl. -t'

In 3. sg. of first conjugation verbs however, the final element -*t*' is dropped (replaced by zero), *unless* the reflexive particle *s'a* follows. The endings are accordingly:

Conjugation:		I.	II.
sg.	1.	-u	
	2.	-eš	-yš
	3.	-e(t')	-yt'
pl.	1.	-emo	-ymo
	2.	-ete	-yte
	3.	-ut'	-at'

If the ending is stressed, stress falls on the ending vowel of monosyllabic endings and on the second vowel of the disyllabic endings (1.2. pl.).

In the second conjugation, before the 1.sg. ending stem-final liquids /l n r/ are palatalized and all consonants susceptible thereof undergo substitutive softening, while before the 3.pl. ending only labials undergo substitutive softening, but all other consonants susceptible to palatalization (except /š ž č/) are palatalized. Examples:

		Conj. I		Conj. II	
sg.	1.	nesú	čytáju	robl'ú	stojú
	2.	neséš	čytáješ	róbyš	stojíš
	3.	nesé	čytáje	róbyt'	stojít'
pl.	1.	nesemó	čytájemo	róbymo	stojimó
	2.	neseté	čytájete	róbyte	stojité
	3.	nesút'	čytájut'	róbl'at'	stoját'
		(nestý	(čytáty	(robýty	(stojáty
		'to carry')	'to read')	'to do')	'to stand')

In stojíš, etc. note automatic change of ending vowel /y/ to /i/ after /j/.

7.2.2 Present active participle and gerund

The formation of the present active participle parallels the formation of 3. pl. present tense completely. Thus, there is a formative vowel (/u/ in conjugation I., /a/ in conjugation II.) followed by the formative consonant /č/ (itself the J-change replacive for the 3. pl. ending consonant /t'/); taken together they constitute the formant -uč- (conj. I.) ∽ -ač- (conj. II.). Before this formant precisely the same consonantal changes of the stem take place as before the 3. pl. present ending.

The present active participle is formed by addition of regular adjective endings to stem plus formant -uč/ač-, while the gerund is formed by addition of the adverbial formant -y to stem plus formant -uč/ač-. Examples:

infinitive	3. pl.	participle	
ležáty	ležát'	ležáčyj	'lying'
pysáty	pýšut'	pýšučyj	'writing'
		gerund	
kolóty	kól'ut'	kól'učy	'stabbing'
bráty	berút'	beručý	'taking'
xvalýty	xvál'at'	xvál'ačy	'praising'

7.2.3 The imperative

The imperative consists of the present stem plus the imperative formant plus imperative endings. The formant is either:

-y- (before sg. endings) ∽ -i- before pl. endings, if

a) the ending of 1. sg. pres. is stressed (and is not preceded by /j/).

b) the verb has the stressed prefix vy- and the primary verb from which it is derived had the formant y ∽ i.

c) the stem ends in a consonant cluster of which the final member is /r l m n/, or in certain other clusters, such as /st/.

or (if none of the above conditions is met) -'Ø- (zero with palatalization of any consonant with a palatalized counterpart, except /š ž č r/ i.e. palatalization of stems in /t d s z l n/).

The endings are: 2. sg. -Ø, 2. pl. -te (after C) ∽ -t' (after V) 1. pl. -mo (slightly archaic). Examples:

robý, robít', robímo (robýty) 'to do'
stúkny, stúkn'it', stúkn'imo (stúknuty) 'to strike'
stáv, stávte, stávmo (stávyty) 'to place'
r'íž, r'ížte, r'ížmo (r'ízaty) 'to cut'
stán', stán'te, stán'mo (státy) 'to stand'
čytáj, čytájte, čytájmo (čytáty) 'to read'

Vowel root verbs in which inf. stem. Cy ∽ pres. stem Cj insert /y/ in the imperative: býty 'to beat' 2. sg. imp. býj (cf. 1. sg. pres. bjú).

Verbs which drop the sequence *-v-a-* in the present tense retain it in the imperative: *daváty* 'to give' 2. sg. imp. *daváj* (cf. 1. sg. pres. *dajú*).

Stems ending in /oj/ replace /o/ by /i/ in the closed syllable of the imperative: *stojáty* 'to stand', imp. *s't'íj*, *s't'íjte*, *s't'íjmo*.

7.2.4 The infinitive

The infinitive is formed by the addition of the formant *-ty* to the infinitive stem. Before this formant /d t/ are replaced by /s/. The stem *plyv-* 'to swim' has an alternate form with /v ⟶ s/ in the infinitive, resulting in *plyvtý* ∽ *plystý*.

Examples:

čytáty	'to read'
prosýty	'to beg'
pektý	'to bake'
pýty	'to drink'
bil'íty	'to become white'
buduváty	'to build'
plestý (stem: plet-)	'to plait'
vestý (stem: ved-)	'to lead'

7.2.5 The past, past active participle, and past gerund. All of these forms involve the addition of the *l-* formant to the infinitive stem. This formant shows the following allomorphs: /l/ preceding vowel, /v/ preceded by vowel and followed by consonant or word-boundary, zero when preceded by consonant and followed by consonant or word-boundary.

The past tense consists of infinitive stem plus l- formant plus the endings: m. -0, n. -o, f. -a pl. -y. Note that these endings are similar to, but not completely identical with, the nominative endings of the adjective. Examples:

m.	n.	f.	pl.	
pysáv	pysálo	pysála	pysály	'wrote'
pík	pekló	peklá	peklý	'baked'

The past active participle has alternate forms, either infinitive stem plus l- formant plus adjective endings or infinitive stem plus l- formant plus formant -š- plus adjective endings. The alternant with -š- is bookish and artificial. Examples: požovt'ílyj or požovt'ívšyj (cf. požovt'íty 'to become yellow', m. past požovt'ív, f. past požovt'íla). The suffix -nu- is dropped in this form: roskvítlyj cf. roskvítnuty 'to bloom'.

The past gerund consists of infinitive stem plus l-formant plus formant -š- plus the adverbializing suffix -y. Examples: kupývšy cf. kupýty 'to buy', stéršy (cf. stérty 'to rub out' m. past stér).

Stem alternations before the l- formant

The suffix -nu- is dropped in some primary verbs with this suffix.

past m. sóx n. sóxlo f. sóxla inf. sóxnuty 'to dry'

In closed syllable /o e/ of the root are replaced by /i/, except in the sequences /oro, olo, er/, when the root already ends in a closed syllable (as in tovktý 'to strike'), or when -nu- has been dropped. Cf. prynestý 'to bring', m. past pryn'ís, past gerund pryn'íššy, f. past pryneslá; moxtý 'to be able', m. past míh, f. past mohlá. In the verb l'axtý (root l'ah-) 'to lie down', /a→i/ in closed syllable: past m. l'íx, f. l'ahlá. /d t/ and final /v/ of plyv- 'to swim' are replaced by zero:[4]

(stem plet- 'to plait') past m. pl'iv n. pleló f. plelá pl. plelý, (stem ved- 'to lead') past m. vív n. veló f. velá pl. velý

7.2.6 The past passive participle and verbal noun

The past passive participle is formed on the infinitive stem, except that second conjugation y- and i- dropping verbs drop the stem vowel, i.e. they use the present stem, and subject the preceding consonant to substitutive softening. The past passive participle formant has these allomorphs:

-en- after consonant (other than in root verbs ending in the sequence /er/). Stems in velars undergo substitutive softening before this formant.

-t- after root verbs in /er/ and after vowel other than /a/ which does not alternate with nasal consonant in present stem.

-*n*- after /a/ which does not alternate with nasal in present stem.

The past passive participle then consists of stem plus formant plus the regular adjective endings. Examples:

-en-	plétenyj	'plaited'
	pécenyj	(cf. inf. *pektý*) 'baked'
	pláčenyj	(cf. inf. *platýty*) 'paid'
	kúplenyj	(cf. inf. *kupýty*) 'bought'
-t-	tértyj	'rubbed'
	kólotyj	'punctured'
	kýnutyj	'thrown'
	býtyj	'beaten'
	vz'átyj	'taken' (pres. stem *vizm*-)
-n-	pýsanyj	'written'
	déržanyj	'held'

Some verbs with stems ending in /o/ or the suffix -*nu*- have alternate forms in which the stem has dropped its final vowel (with appropriate change of formant allomorph from -*t*- to -*en*-).

kólotyj *or* kólenyj 'punctured'

kýnutyj *or* kýnenyj 'thrown'

Verbs with the suffix complex *u-v-a* which shift stress from -*a*- to -*u*- in the participle concurrently change -*u*- to -*o*-. Contrast inf. *mal'uváty* 'to paint' p.p.p. *mal'óvanyj* vs. inf. *pokázuvaty* 'to show' p.p.p. *pokázuvanyj*.

In addition to past passive participle forms with regular adjective endings, an impersonal predicative form with the adverbial ending -*o* also occurs: *órano* '(it is) ploughed', *zbýto* 'struck', *pošýto* '(it has been) sewn'.

The verbal noun is formed in exactly the same fashion as the past passive participle, but with the addition of a formant -*j*- (which causes morphophonemic doubling and palatalization of the preceding /n/ or /t/) and special *místo*-type noun endings (see 3.1) in place of adjective endings. If the formant variant -*en*- is stressed, /e/ is replaced by /i/. The formation is then stem and formant as in past passive participle plus -*j*- formant plus special noun endings:

inf.	vb. n.	
býty	byt't'á	'to beat'
vz'áty	vz'at't'á	'to take'
térty	tert'á	'to rub'
kolóty	kolot't'á	'to puncture'
plésty	plet'ín'n'a	'to plait'
pektý	pečín'n'a	'to bake'
prynésty	prynésen'n'a	'to bring'
pysáty	pysán'n'a	'to write'
daruváty	daruván'n'a	'to donate'

7.3 Stress patterns in the verb

With regard to stress, root verbs and verbs with a stem vowel or suffix -nu- pattern differently.

(a) Stem vowel verbs and those with suffix -nu-

Verbs which stress an element preceding a final stem vowel (or suffix -nu-) have fixed stress. Stem vowel verbs which stress a fixed stem vowel have fixed stress in all forms, excepting the past passive participle, where stress otherwise on final -a- is retracted one syllable (see below).

Stem vowel verbs (and -nu- verbs) retain the stress of the infinitive in all infinitive stem forms, excepting the past passive participle, where, if the stem-final element is -a-, -o-, -i- -y-, or -nu- and there is a preceding syllable, stress is shifted one syllable forward.

Verb terminating in -u-(v- á), i.e. which have stressed stem-vowel -a- in the infinitive stem preceded by suffixes -u-(v-) and which drop the stem-vowel and the preceding /v/ in the present stem, shift stress to -u- in all forms of the present stem.[5]

All other verbs which in the infinitve stem stress an element which is dropped in the present stem stress the ending of the first person singular, present tense, and the formant in the imperative (an exception being stems in /j/, in which case stress in the imperative is shifted one syllable forward). In the remaining present tense forms (2.sg. through 3.pl.) stress may remain on the ending (second conjugation i- and a-dropping verbs particularly tend to retain ending stress) or be shifted one syllable forward (second conjugation -y- dropping verbs particularly tend to shift stress). With some exceptions the present active participle and gerund follows the stress of the 3.pl.present, in that if that form has ending stress, the formant will be stressed in the participle, the ending -y in the gerund.

(b) Root verbs, in the infinitive, may stress either the formant or the stem. If the formant is stressed in the infinitive, the endings will be stressed in the past tense, but the syllable preceding the formant will be stressed in the past active participle and gerund and in the past passive participle. If a stem syllable is stressed in the infinitive, that syllable will be stressed in the remaining infinitive stem forms, except in the past where many verbs show ending stress; prefixed verbs which show N∽a shift stress one syllable forward in the past passive participle.

All consonant root verbs which stress the infinitive formant and most which do not show ending/formant stress in the present stem forms (the small remainder shows stem stress as in búty : búdu 'to be' and moxtý : móžu 'to be able') or ending stress in 1.sg. (and imperative) and shifted (stem) stress in the remaining present stem forms (particularly prefixed derivatives of -jd- 'to go', e.g. pryjtý : pryjdú : prýjdeš 'to come' and those showing N∽*a* alternation, e.g. *pryjn'áty* : *pryjmú* : *prýjmeš*).

Examples:

	(vowel dropping verbs)			(root verb)
inf. stem				
inf.	robýty	kolóty	daruváty	pektý
m.past	robýv	kolóv	daruváv	pék
f.past	robýla	kolóla	daruvála	peklá
p.p.p.	róblenyj	kólotyj	daróvanyj	péčenyj
pres. stem				
2.sg.	róbyš	kóleš	darúješ	pečéš
1.sg.	robl'ú	kol'ú	darúju	pečú
imp.	robý	kol'í	darúj	pečý
	'to do'	'to stab'	'to donate'	'to bake'

All perfective verbs with the prefix *vy-* have fixed stress on that prefix; otherwise prefixes are not usually stressed; an exception being a few verbs with non-syllabic roots which shift stress to the prefix in (some) present stem forms (e.g. *pryjn'áty* 'to accept', 2.sg.pres. *prýjmeš*).

7.4 Athematic verbs

dáty 'to give', *jísty* 'to eat' with their prefixed derivatives and prefixed derivatives in *-vísty*

	present			(special endings)
sg.1.	dám	jím	-vím	-m
2.	dasý	jisý	-visý	-sy
3.	dás't'	jís't'	-vís't'	-t'
pl.1.	damó	jimó	-vimó	-mo
2.	dasté	jisté	-visté	-te
3.	dadút'	jid'át'	-vid'át'	--

The stems are *dad-*, *jid-*, *vid-*; final /d'/→/s'/ before elements beginning with /t'/ and falls before elements beginning with any other consonant; in 3.pl.pres. *dad-* takes the first conjugation ending and *jid-* and *vid-* the second conjugation ending; the remaining forms have special endings, which in 3.sg. and 1.2.pl. are the same as the final element of the regular present tense endings.

In the remaining forms *jísty* and *-visty* retain the stems *jid-*, *vid-* with the usual morphophonemic changes of consonant-root verbs (past *jív*, *jíla*; *-vív*, *-vilá*, etc.), except that the imperative of *jísty* shows irregular stem modification *již-* (*jíž*, *jižté*, *jižmó*), while verbs in *-visty* lack the imperative (the imperative of the corresponding imperfectives in *-vida-* are used instead). *dáty* uses the stem *da-* in all remaining forms, adding /j/ in the imperative (*daj-*).

7.5 The reflexive forms

The reflexive particle -s'a may be attached as a final element to any verb form. After a vowel this particle may optionally be shortened to -s'. Before this particle first conjugation verbs in the 3.sg.pres. show the ending final element /t'/. In combination with preceding consonants, /s'/ undergoes the automatic morphophonemic changes /š + s'→s's', t' + s'→c'c'/ (which however are not reflected in the Cyrillic orthography).

simple	reflexive	
pytáje	pytájec'c'a	'(he) asks'
bjéš	bjés's'a	'you beat'
umyváju	umyvájus'(a)	'I wash'
učýty	učýtys'(a)	'to teach'

7.6 Verb constructions

Verb constructions are verb phrases which may appear in the same syntactic slots as simple verb forms. The following appear in Ukrainian:

7.6.1 Imperfective future constructions:

(a) The present tense of búty as auxiliary, plus the infinitive of an imperfective verb: búdu čekáty 'I will wait'. Auxiliary plus main verb are two words, usually occurring in this order, but separable.

(b) The infinitive of an imperfective verb plus a special enclitic auxiliary consisting of the stem m- plus first conjugation present tense endings; infinitve and auxiliary are inseparable (and are written together in the conventional orthography): robýtymu 'I will do', šýtymemo 'we will sew'.

7.6.2 Conditional construction:

The l-form (past tense form) of the verb plus the enclitic particle by (after consonant) ∽ b (after vowel). Usually the particle appears immediately after the verb form, but it may appear after the first stressed element of the clause, particularly if it is a clause introducer such as á, ščó, ják:

kosýv by, kosýla b	'(he, she) would mow'
vín by skazáv	'he would say'
voná b pryjšlá	'she would come'

If the subject of the subordinate clause is impersonal or the same as the subject of the main clause, the l-form of the verb may be replaced by the infinitive.

(vs'ák týsnuvs'a blýšče do perepravy) ščób péršym
výrvatys' na plaȝdárm 'Everyone was pressing nearer the ferry, so as to be first to arrive at the military base.'

When the conditional of búty 'to be' is implied, the particle by may be used alone.

jagbý men'í cerevýky 'If I had shoes'

7.6.3 Pluperfect:

The l-form plus past tense of búty; little used in the contemporary language, and then usually to indicate "annulled action":

xot'ív búv krýknuty (ta strýmavs'a)

'he wanted to cry out, but stopped'

7.6.4 Optative:

The optative constructions consist of xáj or nexáj plus the 3.sg. or pl. present, or sometimes 1.sg. present :

xáj prac'úje 'Let him work' nexáj já zapláču 'May I weep'

There is also a first person plural optative construction consisting of daváj or davájte plus 1.pl. present or infinitive of perfective verbs:

davájte pokýnemo lúskaty nasín'n'a

'Let's stop cracking sunflower seeds'

Footnotes

[1] Background data for the statements on noun accent patterns are drawn in part from Shevelov, op. cit. and partly from E, Stankiewicz, "Stress alternations in the Ukrainian substantive declension", *Annals of the Ukrainian Academy of Arts and Sciences in the United States* 8, 1960, p. 141-151; data for the statements on verb accent are drawn mainly from Shevelov and Ivčenko.

[2] Npl. (and Apl. if the same as the Npl.) forms of nouns used in conjunction with the numerals 'two, three, four' stress the same syllable as in the Gsg., though showing plural stress in other syntactic slots. Cf. *dvá* *bráty* 'two brothers' Gsg. *bráta*, *dví* *sestrý* 'two sisters' Gsg. *sestrý*, but *pry* *dvóx* *séstrax* 'with two sisters'.

[3] A small subclass of root verbs, 7.1.1.(3) below, shows alternation between present and infinitive stems, either alternation of root-final vowel in the infinitive stem with root final consonant in the present stem or loss of nasal suffix in the infinitive stem.

[4] Alternate forms (corresponding to inf. *plyvtý*) retain /v/ before the l-formant.

[5] **However, if no syllable precedes -*u-(v-)*, stress is on the present tense endings: *kuváty* 'to forge' 1.2.sg. *kujú*, *kujéš*.**